

REMARKS

A substitute Abstract has been provided. The substitute Abstract is of considerably less length, and should be in compliance with the requirements set forth in the office action.

The specification has been corrected to capitalize trademarks, and to remove an extraneous chemical word listed in one paragraph.

To accelerate prosecution towards allowance of claims, claims 15, 91-98, 100-104, and 106 have been canceled, and claims 10 and 99 have been amended. New claims 107-109 have been added which are drawn to subject matter shown in Figure 1 of the application. The application now includes claims 10, 14, 79-90, 99, 105, and 107-109. Both claims 79 and 99 are independent claims.

This amendment makes moot a number of rejections lodged under 35 U.S.C. 112, first and second paragraph. The concurrently filed Declaration of Sang-Hoon Lim provides a detailed analysis of the operations of the invention shown in the drawing figure and described in the patent application.

(A) Claims 99, 100, 102, and 104 were rejected under 35 U.S.C. 112, second paragraph. This rejection is traversed.

Claims 100, 102, and 104 have been canceled, thereby making the rejection moot.

Claim 99 has been amended to clarify the invention. Claim 99 no longer uses the words "said first and second substrates" or "excess". Furthermore, claim 99 now specifies a first plurality of fibers in the first vessel and a second plurality of fibers in the second vessel.

(B) Claims 10, 14, 79-90 and 99-106 were rejected as being obvious over the "admitted state of the prior art taken in view of U.S. Patent 5,156,890 to Rock. This rejection is traversed.

The Examiner has erroneously asserted that closed loop dyeing machines for fibers are known and available. This is not correct. With reference to pages 71:20 to 72:12 referenced by the Examiner, it can be seen that the applicant suggests that components of known dyeing machine systems may be used in the

invention (see page 72, lines 6 and 7). Note that Figure 1 shows two dye machines 32 and 34. However, there is no admission that “closed loop” dyeing machines were known and commercially available. In fact, the system of valves and piping shown in Figure 1, which makes the system a “closed loop”, was designed by the applicants. Further, the concurrently filed Declaration of Sang-Hoon Lim establishes that none of the dye machines identified in the patent application are “closed loop dyeing machines”, and explains that dyes are not recycled due to the process of “exhaustion” (see item 5 of the Declaration). In view of the above, the Examiner should now withdraw the incorrect assertion that closed loop dyeing machines are part of the prior art.

Furthermore, both independent claim 79 and 99 clearly contemplate recovery of fire retardant chemicals from one vessel and use of the recovered fire retardant chemicals on a plurality of fibers in a different vessel. This is accomplished either using valves 54 and 56, or by using centrifuge 12 as shown in Figure 1 of the application (see also the discussion in item 4 of the concurrently filed declaration). Rock, in contrast, does not recover fire retardant chemicals from one vessel and re-use it in another vessel. Rock does not employ centrifuges (see claims 108 and 109). Further, Rock differs from the present invention for the reasons set forth in item 6 of the concurrently filed Declaration of Sang-Hoon Lim.

Given that the conclusion that closed loop dyeing machines are known is erroneous, it should also be concluded (a) one of ordinary skill in the art would not combine a known dye machine with the Rock system as the two systems function completely differently and are directed to different subject matter (see Declaration of Sang-Hoon Lim at item 6), and (b) any combination of a known dye machine, with Rock, if made, would not yield or make obvious the claimed invention to one of ordinary skill in the art because all that would be suggested would be to substitute the laundry machine with a dye machine and retain the batch processes described in Rock (i.e., there would not be a suggestion to recover and recycle fire retardant chemicals from one dye machine to another).

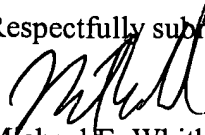
In view of the above, claim 99, and dependent claims 10, 105 and 107-109, would not be obvious over Rock and known dye machines.

In view of the above, none of claims 10, 14, 79-90, 99, 105, and 107-109

would be obvious to one of ordinary skill in the art in view of combinations of the commonly known dyeing machines and Rock.

If any extensions of time are required to gain entry of this response, provisional petition therefore is hereby made. If any fees are required to enter this response or to gain entry of any other accompanying paper, the Commissioner is authorized to charge attorney's deposit account 50-2041 (Whitham, Curtis & Christofferson).

Respectfully submitted,



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